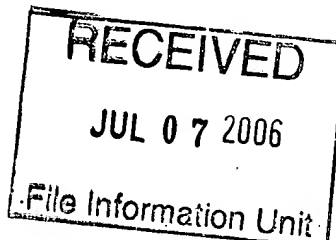


Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

Approved for use through 7/31/2006. OMB 0551-3031
U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

REQUEST FOR ACCESS TO AN ABANDONED APPLICATION UNDER 37 CFR 1.14

Bring completed form to:
File Information Unit
Crystal Plaza Three, Room 1D01
2021 South Clark Place
Arlington, VA
Telephone: (703) 303-2733



In re Application of

Queen

Application Number

07/310252

Filed

2,13,89

Paper No.

55

I hereby request access under 37 CFR 1.14(a)(1)(iv) to the application file record of the above-identified ABANDONED application, which is identified in, or to which a benefit is claimed, in the following document (as shown in the attachment):

United States Patent Application Publication No. _____, page, _____ line _____.

United States Patent Number 5693761, column _____, line, _____ or

WIPO Pub. No. _____, page _____, line _____.

Related Information about Access to Pending Applications (37 CFR 1.14):

Direct access to pending applications is not available to the public but copies may be available and may be purchased from the Office of Public Records upon payment of the appropriate fee (37 CFR 1.19(b)), as follows:
For published applications that are still pending, a member of the public may obtain a copy of:

- the file contents;
- the pending application as originally filed; or
- any document in the file of the pending application.

For unpublished applications that are still pending:

- (1) If the benefit of the pending application is claimed under 35 U.S.C. 119(e), 120, 121, or 365 in another application that has: (a) issued as a U.S. patent, or (b) published as a statutory invention registration, a U.S. patent application publication, or an international patent application publication in accordance with PCT Article 21(2), a member of the public may obtain a copy of:
 - the file contents;
 - the pending application as originally filed; or
 - any document in the file of the pending application.
- (2) If the application is incorporated by reference or otherwise identified in a U.S. patent, a statutory invention registration, a U.S. patent application publication, or an international patent application publication in accordance with PCT Article 21(2), a member of the public may obtain a copy of:
 - the pending application as originally filed.

Kevin Rodriguez

Signature

KEVIN Rodriguez

Typed or printed name

7-7-06

Date

Registration Number, if applicable

(703) 418-2777

Telephone Number

RECEIVED FOR USE ONLY	
Approved by <u>07/07/2006</u>	(Initials)
File Information Unit	



US005693761A

United States Patent [19]

Queen et al.

[11] Patent Number: **5,693,761**[45] Date of Patent: **Dec. 2, 1997****[54] POLYNUCLEOTIDES ENCODING
IMPROVED HUMANIZED
IMMUNOGLOBULINS****[75] Inventors:** Cary L. Queen, Los Altos; William P. Schneider, Mountain View; Harold E. Selick, Belmont, all of Calif.**[73] Assignee:** Protein Design Labs, Inc., Mountain View, Calif.**[21] Appl. No.:** 474,040**[22] Filed:** Jun. 7, 1995**Related U.S. Application Data****[62]** Division of Ser. No. 634,278, Dec. 19, 1990, Pat. No. 5,530,101, which is a continuation of Ser. No. 590,274, Sep. 28, 1990, abandoned, and a continuation of Ser. No. 310,252, Feb. 13, 1989, abandoned, which is a continuation of Ser. No. 290,975, Dec. 28, 1988, abandoned.**[51] Int. Cl.⁶** C07H 21/04**[52] U.S. Cl.** 536/23.53; 530/387.3;
435/320.1; 435/252.3**[58] Field of Search** 536/23.53; 530/387.3;
435/320.1, 252.3**[56] References Cited****U.S. PATENT DOCUMENTS**

4,578,335	3/1986	Urdal et al.	530/351
4,816,397	3/1989	Boss et al.	435/68
4,816,565	3/1989	Honjo et al.	435/69.1
4,816,567	3/1989	Cabilly et al.	530/387
4,845,198	7/1989	Urdal et al.	530/387
4,867,973	9/1989	Goers et al.	424/85.91
5,198,359	3/1993	Taniguchi et al.	435/252.3
5,225,539	7/1993	Winter	530/387.3
5,476,786	12/1995	Huston et al.	435/85.8

FOREIGN PATENT DOCUMENTS

0 120 694	10/1984	European Pat. Off.	
0171496	2/1986	European Pat. Off.	
0173494	3/1986	European Pat. Off.	
0184187	6/1986	European Pat. Off.	
0256654	7/1987	European Pat. Off.	
0239400	9/1987	European Pat. Off.	
0266663	6/1988	European Pat. Off.	
0 323 806	7/1989	European Pat. Off.	
0 328 404	8/1989	European Pat. Off.	
0 365 209	4/1990	European Pat. Off.	
0 365 997	5/1990	European Pat. Off.	
0 125 023	6/1991	European Pat. Off.	
0460167	12/1991	European Pat. Off.	
2188941	10/1987	United Kingdom	
8928874	12/1989	United Kingdom	
WO 86/05513	9/1986	WIPO	
WO 87/02671	5/1987	WIPO	
WO 88/09344	12/1988	WIPO	
WO 89/01783	3/1989	WIPO	
91/09967	7/1991	WIPO	

OTHER PUBLICATIONSBetter et al. "Escherichia coli Secretion of an Active Chimeric Antibody Fragment," *Science*, 240:1041-1043 (1988).Bird et al., "Single-Chain Antigen-Binding Proteins," *Science*, 242:423-426 (1988).Boulianne et al., "Production of functional chimeric mouse/human antibody," *Nature*, 312:643-646 (1984).Carter et al., "Humanization of an anti-p185^{HER2} antibody for human cancer therapy," *Proc. Natl. Acad. Sci.*, 89:4285-4289 (1992).Chothia, C. and A.M. Lesk, "Canonical Structures for the Hypervariable Regions of Immunoglobulins," *J. Mol. Biol.*, 196:901-917 (1987).Co et al., "Humanized antibodies for antiviral therapy," *Proc. Natl. Acad. Sci.*, 88:2869-2873 (1991).Co et al., "Chimeric and humanized antibodies with specificity for the CD33 antigen," *J. Immunol.*, 148:1149-1154 (1992).Daugherty et al., "Polymerase chain reaction facilitates the cloning, CDR-grafting, and rapid expansion of a murine monoclonal antibody directed against the CD18 component of leukocyte integrins," *Nuc. Acids. Res.*, 19:2471-2476 (1991).Ellison et al., "The nucleotide sequence of a human immunoglobulin c(gamma)₁ gene," *Nucleic Acids Res.*, 10:4071- (1982).Farrar, J., "The biochemistry, biology, and the role of interleukin-2 in the induction of cytotoxic T cell and antibody-forming B cell receptors," *Immunol. Rev.*, 63:129-166 (1982).Foote et al., "Antibody framework residues affecting the conformation of hypervariable loops," *J. Mol. Biol.*, 224:487-499 (1992).Gorman et al., "Reshaping a therapeutic CD4 antibody," *Proc. Natl. Acad. Sci.*, 88:4181-4185 (1991).

(List continued on next page.)

Primary Examiner—Lila Feisee**Assistant Examiner**—Julie E. Reeves**Attorney, Agent, or Firm**—Townsend and Townsend and Crew LLP**[57] ABSTRACT**

Novel methods for producing, and compositions of, humanized immunoglobulins having one or more complementarity determining regions (CDR's) and possible additional amino acids from a donor immunoglobulin and a framework region from an accepting human immunoglobulin are provided. Each humanized immunoglobulin chain will usually comprise, in addition to the CDR's, amino acids from the donor immunoglobulin framework that are, e.g., capable of interacting with the CDR's to effect binding affinity, such as one or more amino acids which are immediately adjacent to a CDR in the donor immunoglobulin or those within about 3 Å as predicted by molecular modeling. The heavy and light chains may each be designed by using any one or all of various position criteria. When combined into an intact antibody, the humanized immunoglobulins of the present invention will be substantially non-immunogenic in humans and retain substantially the same affinity as the donor immunoglobulin to the antigen, such as a protein or other compound containing an epitope.